Index

Advisory Committee on Major Hazards 12, 14, 17, 59
Agropolitan districts 201
Air freight services, high technology industry 106, 115, 128
Airports, high technology industry 103, 112
Anchorage of technology 205
Aughinish Alumina 176

Boston's Logan International Airport development 84
Britain, hazardous installation control 1–75
Burnley District Local Plan 31
Business park, Ireland 173

Cambridge Science Park 93
Car sharing 136
Chemical hazards 11
Chemical industry, Cheshire 29
Cheshire, County Structure Plan 29
Compensation, hazardous installations 45
Consultation distance, hazardous installations 15, 37, 41
Control of industrial Major Accident Hazards Regulations 14, 15, 34, 62
Cooperative Education Programme, Ireland 170
Courier services 136
Customs-Free Airport Act 153

Dangerous Substances (Notification and Marking of Sites) Regulations 17
Datapost 135
Department of the Environment, hazardous installations 17
Development control, hazardous installations 33, 37
Development zone, Ireland 165, 201, 210
  linkages 185
Downgrading of domestic industry 190

Economic development pressures 44
EEC
  industry and transport 107, 141
  Ireland 197
Electronics industry
  Ireland 166, 177, 199
  Scotland 120, 122
Employment
  foreign investment, Ireland 176
  high technology industry 93
  women, Ireland 194
Engineering industry, Ireland 166
Environmental impact assessment, hazardous installations 34
Environmental safeguarding zones 30
Explosive substances 14
Export processing zones, Ireland 153, 154, 201
Express parcels service, electronics industry 134

Factory Inspectorate 9
Federal Express 134
Flammable gases and liquids 14
Flixborough 11
Foreign direct investment, Ireland 153
  benefits 192
  costs 177, 190
  impact on development 166
  jobs 176
  linkages 184
  price of success 197
  sexual division of labour 194
  taxes 183
Foreign-owned firms, impact on host economy 162, 166
Forward planning, hazardous development 27
Free production zones 153, 201
Freight forwarders 129

General Development Order 17
Global integration 167
Grants, Ireland 177
Grants mentality 191

Greenfield site development, hazardous installations 33

Hazardous installations 1–75
compensation 45
constraints to separation 41
control system 14
development control 33, 37, 47
forward planning 27
land value loss 43
planning legislation reform 17
planning policy 22
planning procedure reform 19
public concern and participation 59
recognition of the problem 9
risk 53
technical advice 50
way forward 66, 70
Hazardous substance consent 67
Health and Safety Commission 11, 62
Health and Safety Executive 11, 12, 19, 22, 30, 34, 42, 48, 50, 70
Health and Safety at Work Act 9, 11, 14, 22
High technology industry 77–146
definition 86
employment 93
express parcels service 134
foreign investment, Ireland 167, 169
just-in-time production 131
location quotients, U.K. 95
logistics 107
product life-cycle 101
Scotland 117, 128
transport costs 97, 99, 111, 130
transport and location 97, 111, 118, 128
trends 92

ICI, hazardous installations 35
Incentives, foreign investment in Ireland 153, 177, 184, 197
Industrial development 44
Industrial Development Authority, Ireland 157, 161, 177
Industrial estate, Shannon 153
Industry, transport needs 77–146
Information Related Durable Equipment Industries 86
Innovation Centre for Small Industry 170
International sub-contracting 156
Inventory control, transport 108, 131
Ireland, foreign investment and development 147–216
costs and benefits 176, 190
economic and socio-political history 157
impact of foreign-owned firms 162, 166
jobs 176
linkages 184
price of success 197
sexual division of labour 194
Shannon-Plassey package 173
taxes 183
Irish Goods Council 186

Jobs, foreign investment in Ireland 176
Just-in-time production 109, 131

Labour–capital relationship, Ireland 174
Labour force, Ireland 180
sexual division 194
Labour movements, high-technology industry 136
Land values, hazardous installations 43
Limerick 162
National Institute for Higher Education 163, 170
Plassey Technological Park 169
Linkages, Ireland 184, 202
Liquid Petroleum Gas 14, 33
Local Government (Access to Information) Act 62
Local planning authorities, hazardous installations 9, 15, 18, 22, 28, 47, 50, 67
Location theory, high technology industry 97
Logistics, high technology industry and transport 108, 131

M4 corridor 114, 117
Major hazards 10, 11
Major Hazards Assessment Unit, HSE 15, 35, 52
Management, foreign and native firms 191
Manufacturing industry, Ireland 158
costs and benefits from foreign investment 176, 196
sexual division of labour 194
Massachusetts Technology Centre 84
Matchmaker 186
Mersey Marshes Plan 29
Microelectronics Applications Centre 170, 172, 182
Multinational companies 92
linkages 185
Silicon Glen 121

National Institute for Higher Education, Limerick 163, 170
National Linkage Programme 185, 188, 199
Notification of Installations Handling Hazardous Substances Regulations 14, 15, 18, 19, 37
Not in my back yard syndrome 61
Nypro (U.K.) Ltd. 11

Outworkers 182

Paraquat plant, ICI 35
Plassey Technological Park 163, 169, 173, 182, 205
Polluter-pays 25
Pressure groups, hazardous installations 60
Product life-cycle, high technology industry 101
Profitability 179
Project evaluation 179
Protectionism, Ireland 157
Public participation, hazardous installations 59

Risk
  hazardous installations 21, 24, 33, 53, 64
  public perception 60
Road freight transport 100, 119, 129
Robens Committee 9

Science parks 84
  transport needs 112
Scotland, high technology industry 117
Securicor Parcels 135
Seveso 12
Sexual division of labour 194
Shannon Free Airport Development company 153, 158, 161, 177
Shannon Industrial Estate 153
  occupancy 213
Shannon-Plassey package 173, 203, 208
Shipping, industrial components 131
Silicon Fen 117
Silicon Glen 85, 92, 117, 120
  express parcels service 135
  just-in-time production 131
  person movements 136
  transport facilities 123, 128
Small Indigenous Industry Programme, Ireland 163
Standard Industrial Classifications Minimum List Headings, high technology industries 87
Stanlow/Ellesmere Port area, hazardous installations 29

Tax-free zones, Ireland 153, 183
Technology anchorage 205
Technology Parks, Ireland 163, 169, 205
Telesis Report 177, 191, 198
TNT Overnite 135
Town and Country Planning Act, hazardous installations 17
Toxic substances 15
Trade unions 182
Transfer of technology 205
Transfer pricing 187
Transnational corporations
  foreign direct investment 155
  staffing and training 191
  types of jobs 180
Transnationality of production 166
Transport, high technology industry 77–146
  costs 97, 99, 130
  express parcels service 134
  just-in-time production 131
  location theory 97
  logistics 107, 131
  product life-cycle 101
  Scotland 117, 128
Transportation of dangerous substances 14

United Nations Industrial Development Organization 154
Urban blight 44
Use Classes Order 17

Value-added 202
Vertical integration 187

Washington-Dulles Airport Foreign Trade Zone 84
Women in manufacturing workforce 194
World Export Processing Zone Association 155

Contents

MULTI-CRITERIA DECISION MAKING (MCDM) TECHNIQUES IN PLANNING 1

B. H. MASSAM

INDUSTRIAL DEVELOPMENT INITIATIVES IN ENGLAND AND WALES: THE ROLE OF THE DISTRICT COUNCILS 85

H. W. ARMSTRONG and J. FILDES

ECONOMIC IMPACT ANALYSIS: A U.K. LITERATURE SURVEY AND BIBLIOGRAPHY 157

J. A. LEWIS

Index

Accelerator theory 168
Additive models 49
Alternate plans 18, 22, 42, 45, 69
Assisted areas 118, 121, 135
Association of District Councils 100, 107, 123, 139, 142

Benchmark plans 31, 36, 42
Best practice techniques 164, 187
Borda–Kendall method 45
Business "start up" grants 100

Chartered Institute of Public Finance and Accountancy 106, 109
Community Programmes 93
Compensating variation 171
Compensatory models 49
Consensus maximization approaches 45
Concordance analysis 54, 66, 68, 75
Cooperative Development Agency 103
County Councils
  expenditure on economic development and promotion 110, 134
  industrial development 97

Decision analysis 11
Decision making 15
Development Areas 94, 120, 144
Development Commission 97
District Councils
  expenditure on economic development and promotion 109, 134
  industrial development policies 91, 100, 106, 109, 134
DYRHOD 44

Econometric models 180
Economic base multiplier 169
Economic development and promotion, district councils 106, 109, 134
Economic impact analysis, bibliography 191–209
  impact studies 191
  methodological issues 202
  policy impact studies 199
  regional and urban models 206, 207
Economic impact analysis, U.K. literature survey 163–190
  economic base multipliers 169
  input–output models 172
  intersectoral flows analysis 179
  Keynesian income and employment multipliers 164, 189
  multiplier concepts 164
  social accounting 171
  sub-national econometric models 180
  U.K. studies 180
Educational establishments, economic impact studies 181
ELECTRE 33, 51, 54, 72, 75
Employment multipliers 165
English Estates 97
Enterprise Allowance Scheme 103
Enterprise Trusts 142
European Agricultural Guidance and Guarantee Fund 94
European Community, industrial development 93
European Coal and Steel Community 94
European Investment Bank 94
European Regional Development Fund 93, 102, 105
Expected value criterion 51

Financial inducements 126
Fire station location in Canada 67
Forecasting model 174
Function-form 30

Generic planning problem 11, 18, 64, 79
Goals Achievement Matrix 17, 22
Grand Index 25

Grants, industrial development, district councils 94, 100, 126

Health centres in Zambia, site selection 65
Highlands and Islands Development Board 97

Ideal plans 36
Immigration, income multipliers 166
Impact studies
  bibliography 191–202
  economic base multipliers 169
  input–output models 172
  intersectoral flows analysis 179
  Keynesian income and employment multipliers 164, 189
  multiplier concepts 164
  social accounting 171
  sub-national econometric models 180
  U.K. studies 180
Impact values 28
Income multipliers 164
Industrial contraction, multiplier effect 169
Industrial development initiatives, role of district councils 85–156
  community-level intervention 98
  county-level intervention 97
  district-level intervention 98
  European-level intervention 93
  national government intervention 94
  regional-level intervention 97
Industrial Improvement Areas 103
Industrial plants, economic impact studies 182
Input–output models 172
  limitations 178
  sub-national 174
  U.K. 186
Input–output multipliers 169
Interest groups 22, 27
Intermediate Areas 95, 120, 144
Intersectoral flows analysis 179
Investment grants 94
Investment, multipliers 168

Job creation grants 100
Jobs, employment multipliers 165

Keynesian income multipliers, economic impact 164, 189

Labour subsidies 98
Lexicographic ordering methods 40
Loans for economic development 127
Loan Guarantee Scheme 103
Local authorities, industrial development 91
Local income multiplier 167
Locally Unwanted Land Uses 78

Manpower Services Commission 103
Metropolitan county councils 98, 110, 113, 134, 137
Mid-Wales Development 97
Minowski distance measure 43, 44
Motorway location, France 69
Multi-Attribute Decision Making 10, 15
Multi-Attribute Trade Off System 52
Multi-Attribute Utility Theory 10, 15, 51
Multi-criteria decision making 1–84
  additive models 49
  benchmarks and ideal plans 36
  components 21
  concordance methods 54
  consensus maximization approaches 45
  generic planning problem 15
  graphical approaches 42
  lexicographic ordering methods 40
  literature 9
  planning 77
  priority rating problems 73
  related fields 10
  route alignment problems 69
  scores and impact values 28
  site selection problems 65
  standardization of raw data 32
Multi-Objective Decision Making 10, 15
Multiplicand 167
Multipliers, economic impact analysis 164

National government intervention, industrial development 94
National input–output 173
National Programmes 93
Not In My Back Yard 78

Office and Service Industries Scheme 94
Oil development, economic impact studies 184
Outranking methods 54, 73

Planning Assistance Through Technical Evaluation of Relevance Numbers 22, 52
Planning Balance Sheet 17
Policy impact studies, bibliography 199
Principled negotiation 78
Priority rating problems 72
Probabilistic Linear Vector Analysis 52
Programme assistance, ERDF 93
PROMETHEE 58
Public Choice Theory 10, 16

Quotas, ERDF 93, 105

Redundancy, multiplier effect 169
REGIME 58
Regional Development Grants 94, 105, 106, 138
Regional Employment Premium 98
Regional industrial policies 91, 97, 105, 120, 134
Regional input–output models 174
Regional models for economic impact analysis, bibliography 206
Regional Selective Assistance 94, 105, 106, 138
Relevance Matrix 23
RHOD 44
Route alignment problems 69

Saaty's Analytical Hierarchy Procedure 52
Scottish Development Agency 97
Sectorial multipliers 168
SELECTRA 57, 72, 75
Service projects, grants 94
Simple additive weighting 50
Simple Multi-Attribute Rating Technique 52
Site selection, MCDM 65
Small Firms Information Service 103
Social Accounting 171
Spatial Impact 171
Spatial industrial policy 91, 93
Special Development Areas 94, 120, 144
Standardization of raw data 32
Sub-national econometric models 180
Sub-national input–output models 174

Technique for Ordered Preference by Similarity to Ideal Solution 43
Tourism, economic impact studies 181
Tourist multipliers 168
Transformation functions 34
Transportation, MCDM 73, 74

U.K., economic impact analysis 157–209
Unemployment, district council expenditure 116
Urban Aid programme 102
Urban base multipliers 170
Urban models for economic impact analysis, bibliography 206

Welsh Development Agency 97